

SEQUENCE LISTING

<110> Hunter, Tony  
Lu, Kun Ping

<120> NIMA INTERACTING PROTEINS

<130> 66671-078

<150> US 10/616,410

<151> 2003-07-08

<160> 22

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1014

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (25)...(513)

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ggc tgg gag aag cgc atg agc cgc agc tca ggc cga gtg tac tac ttc	99
Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg Val Tyr Tyr Phe	
10 15 20 25	
aac cac atc act aac gcc agc cag tgg gag cgg ccc agc ggc aac agc	147
Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro Ser Gly Asn Ser	
30 35 40	
agc agt ggt ggc aaa aac ggg cag ggg gag cct gcc agg gtc cgc tgc	195
Ser Ser Gly Gly Lys Asn Gly Gln Gly Glu Pro Ala Arg Val Arg Cys	
45 50 55	
tcg cac ctg ctg gtg aag cac agc cag tca cgg cgg ccc tcg tcc tgg	243
Ser His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp	
60 65 70	
cgg cag gag aag atc acc cgg acc aag gag gag gcc ctg gag ctg atc	291
Arg Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile	
75 80 85	
aac ggc tac atc cag aag atc aag tcg gga gag gag gac ttt gag tct	339

Asn Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser  
90 95 100 105

ctg gcc tca cag ttc agc gac tgc agc tca gcc aag gcc agg gga gac 387  
Leu Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp  
110 115 120

ctg ggt gcc ttc agc aga ggt cag atg cag aag cca ttt gaa gac gcc 435  
Leu Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala  
125 130 135

tcg ttt gcg ctg cgg acg ggg gag atg agc ggg ccc gtg ttc acg gat 483  
Ser Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp  
140 145 150

tcc ggc atc cac atc atc ctc cgc act gag tgaggggtggg gagcccaggc 533  
Ser Gly Ile His Ile Ile Leu Arg Thr Glu  
155 160

ctggcctcgg ggcagggcag ggcggctagg ccggccagct cccccttgcc cgccagccag 593  
tgcccgaaacc cccactccc tgccaccgtc acacagtatt tattgttccc acaatggctg 653  
ggagggggcc cttccagatt gggggccctg ggggtcccccac tccctgtcca tccccagttg 713  
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a 1014

<210> 2  
<211> 163  
<212> PRT  
<213> Homo sapiens

<400> 2  
Met Ala Asp Glu Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser  
1 5 10 15  
Arg Ser Ser Gly Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser  
20 25 30  
Gln Trp Glu Arg Pro Ser Gly Asn Ser Ser Ser Gly Gly Lys Asn Gly  
35 40 45  
Gln Gly Glu Pro Ala Arg Val Arg Cys Ser His Leu Leu Val Lys His  
50 55 60  
Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg Gln Glu Lys Ile Thr Arg  
65 70 75 80  
Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn Gly Tyr Ile Gln Lys Ile  
85 90 95  
Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu Ala Ser Gln Phe Ser Asp  
100 105 110  
Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu Gly Ala Phe Ser Arg Gly  
115 120 125  
Gln Met Gln Lys Pro Phe Glu Asp Ala Ser Phe Ala Leu Arg Thr Gly  
130 135 140

Glu Met Ser Gly Pro Val Phe Thr Asp Ser Gly Ile His Ile Ile Leu  
145                      150                      155                      160  
Arg Thr Glu

<210> 3  
<211> 31  
<212> DNA  
<213> Homo sapiens

<400> 3  
gcgctgcag tatctataya tggaataytg t 31

<210> 4  
<211> 31  
<212> DNA  
<213> Homo sapiens

<400> 4  
gcgcggatcc rggtttcaga ggktyraasa g 31

<210> 5  
<211> 30  
<212> DNA  
<213> Homo sapiens

<400> 5  
gcgcgtacca agwccacygt ayattattcc 30

<210> 6  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> synthetic peptide

<400> 6  
Met Tyr Asp Val Pro Asp Tyr Ala Ser Arg Pro Gln Asn  
1                      5                      10

<210> 7  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> synthetic peptide

<400> 7  
Met Ala Ser Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Ser Pro Glu Phe

1				5					10					15	
Leu	Val	Asp	Pro	Pro	Gly	Ser	Lys	Asn	Ser	Ile	Ala	Arg	Gly	Lys	Met
			20					25					30		

<210> 8  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 8															
Glu	Lys	Leu	Pro	Pro	Gly	Trp	Glu	Lys	Arg	Met	Ser	Arg	Ser	Ser	Gly
1				5					10					15	
Arg	Val	Tyr	Tyr	Phe	Asn	His	Ile	Thr	Asn	Ala	Ser	Gln	Trp	Glu	Arg
			20					25					30		
Pro	Ser	Gly	Asn	Ser	Ser	Ser									
			35												

<210> 9  
<211> 39  
<212> PRT  
<213> Yeast ESS1

<400> 9															
Thr	Gly	Leu	Pro	Thr	Pro	Trp	Thr	Val	Arg	Tyr	Ser	Lys	Ser	Lys	Lys
1				5					10					15	
Arg	Glu	Tyr	Phe	Phe	Asn	Pro	Glu	Thr	Lys	His	Ser	Gln	Trp	Glu	Glu
			20					25					30		
Pro	Glu	Gly	Thr	Asn	Lys	Asp									
			35												

<210> 10  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 10															
Val	Pro	Leu	Pro	Ala	Gly	Trp	Glu	Met	Ala	Lys	Thr	Ser	Ser	Gly	Gln
1				5					10					15	
Arg	Tyr	Phe	Leu	Asn	His	Ile	Asp	Gln	Thr	Thr	Thr	Trp	Gln	Asp	Pro
			20					25					30		
Arg	Lys	Ala	Met	Leu	Ser										
			35												

<210> 11  
<211> 38  
<212> PRT  
<213> Mus musculus

<400> 11

Ser Pro Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Val Leu Gly Arg  
1 5 10 15  
Thr Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro  
20 25 30  
Ser Pro Asp Asp Asp Leu  
35

<210> 12  
<211> 38  
<212> PRT  
<213> Yeast RSPS

<400> 12  
Gly Arg Leu Pro Pro Gly Trp Glu Arg Arg Thr Asp Asn Phe Gly Arg  
1 5 10 15  
Thr Tyr Tyr Val Asp His Asn Thr Arg Thr Thr Thr Trp Lys Arg Pro  
20 25 30  
Thr Leu Asp Gln Thr Glu  
35

<210> 13  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 13  
Thr Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro Asn Lys Val  
1 5 10 15  
Pro Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp Asp His Pro  
20 25 30  
Lys Met Thr Glu Leu Tyr  
35

<210> 14  
<211> 37  
<212> PRT  
<213> Rattus rattus

<400> 14  
Ser Asp Leu Pro Ala Gly Trp Met Arg Val Gln Asp Thr Ser Gly Thr  
1 5 10 15  
Tyr Tyr Trp His Ile Pro Thr Gly Thr Thr Gln Trp Glu Pro Pro Gly  
20 25 30  
Arg Ala Ser Pro Ser  
35

<210> 15  
<211> 14  
<212> PRT

<213> Artificial Sequence

<220>

<223> consensus sequence

<400> 15

Leu	Pro	Gly	Trp	Glu	Gly	Tyr	Tyr	Asn	His	Thr	Thr	Trp	Pro
1				5					10				

<210> 16

<211> 105

<212> PRT

<213> Homo sapiens

<400> 16

His	Leu	Leu	Val	Lys	His	Ser	Gln	Ser	Arg	Arg	Pro	Ser	Ser	Trp	Arg
1				5					10					15	
Gln	Glu	Lys	Ile	Thr	Arg	Thr	Lys	Glu	Glu	Ala	Leu	Glu	Leu	Ile	Asn
			20					25					30		
Gly	Tyr	Ile	Gln	Lys	Ile	Lys	Ser	Gly	Glu	Glu	Asp	Phe	Glu	Ser	Leu
		35					40					45			
Ala	Ser	Gln	Phe	Ser	Asp	Cys	Ser	Ser	Ala	Lys	Ala	Arg	Gly	Asp	Leu
	50					55					60				
Gly	Ala	Phe	Ser	Arg	Gly	Gln	Met	Gln	Lys	Pro	Phe	Glu	Asp	Ala	Ser
65					70				75					80	
Phe	Ala	Leu	Arg	Thr	Gly	Glu	Met	Ser	Gly	Pro	Val	Phe	Thr	Asp	Ser
			85						90					95	
Gly	Ile	His	Ile	Ile	Leu	Arg	Thr	Glu							
			100					105							

<210> 17

<211> 107

<212> PRT

<213> Yeast ESS1

<400> 17

His	Thr	Leu	Ile	Lys	His	Lys	Asp	Ser	Arg	Arg	Pro	Ala	Ser	His	Arg
1				5					10					15	
Ser	Glu	Asn	Ile	Thr	Ile	Ser	Lys	Gln	Asp	Ala	Thr	Asp	Glu	Leu	Lys
			20					25					30		
Thr	Leu	Ile	Thr	Arg	Leu	Asp	Asp	Asp	Ser	Lys	Thr	Asn	Ser	Phe	Glu
		35					40					45			
Ala	Leu	Ala	Lys	Glu	Arg	Ser	Asp	Cys	Ser	Ser	Tyr	Lys	Arg	Gly	Gly
	50					55					60				
Asp	Leu	Gly	Trp	Phe	Gly	Arg	Gly	Glu	Met	Gln	Pro	Ser	Phe	Glu	Asp
65					70				75					80	
Ala	Ala	Phe	Gln	Leu	Lys	Val	Gly	Glu	Val	Ser	Asp	Ile	Val	Glu	Ser
			85					90						95	
Gly	Ser	Gly	Val	His	Val	Ile	Lys	Arg	Val	Gly					
			100					105							

<210> 18  
<211> 83  
<212> PRT  
<213> E. coli

<400> 18  
His Ile Leu Val Lys Glu Glu Lys Leu Ala Leu Asp Leu Leu Glu Gln  
1 5 10 15  
Ile Lys Asn Gly Ala Asp Phe Gly Lys Leu Ala Lys Lys His Ser Ile  
20 25 30  
Cys Pro Ser Gly Lys Arg Gly Gly Asp Leu Gly Glu Phe Arg Gln Gly  
35 40 45  
Gln Met Val Pro Ala Phe Asp Lys Val Val Phe Ser Cys Pro Val Leu  
50 55 60  
Glu Pro Thr Gly Pro Leu His Thr Gln Phe Gly Tyr His Ile Ile Lys  
65 70 75 80  
Val Leu Tyr

<210> 19  
<211> 84  
<212> PRT  
<213> B.subtilis

<400> 19  
His Ile Leu Val Ala Asp Lys Lys Thr Ala Glu Glu Val Glu Lys Lys  
1 5 10 15  
Leu Lys Lys Gly Glu Lys Phe Glu Asp Leu Ala Lys Glu Tyr Ser Thr  
20 25 30  
Asp Ser Ser Ala Ser Lys Gly Gly Asp Leu Gly Trp Phe Ala Lys Glu  
35 40 45  
Gly Gln Met Asp Glu Thr Phe Ser Lys Ala Ala Phe Lys Leu Lys Thr  
50 55 60  
Gly Glu Val Ser Asp Pro Val Lys Thr Gln Tyr Gly Tyr His Ile Ile  
65 70 75 80  
Lys Lys Thr Glu

<210> 20  
<211> 91  
<212> PRT  
<213> C. jejuni

<400> 20  
His Thr Leu Val Ala Thr Glu Lys Glu Ala Lys Asp Ile Ile Asn Glu  
1 5 10 15  
Leu Lys Gly Leu Lys Gly Lys Glu Leu Asp Ala Lys Phe Ser Glu Leu  
20 25 30  
Ala Lys Glu Lys Ser Ile Asp Pro Gly Ser Lys Asn Gln Gly Gly Glu  
35 40 45

Leu	Gly	Trp	Phe	Asp	Gln	Ser	Thr	Met	Val	Lys	Pro	Phe	Thr	Asp	Ala
50						55					60				
Ala	Phe	Ala	Leu	Lys	Asn	Gly	Thr	Ile	Thr	Thr	Thr	Pro	Val	Lys	Thr
65					70					75					80
Asn	Phe	Gly	Tyr	His	Val	Ile	Leu	Lys	Glu	Asn					
				85					90						

<210> 21  
 <211> 67  
 <212> PRT  
 <213> A. thaliana

Ile	Val	Ser	Lys	Ala	Asn	Phe	Glu	Glu	Val	Ala	Thr	Arg	Val	Ser	Asp
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Cys	Ser	Ser	Ala	Lys	Arg	Gly	Gly	Asp	Leu	Gly	Ser	Phe	Gly	Arg	Gly
			20					25					30		
Gln	Met	Gln	Lys	Pro	Phe	Glu	Glu	Ala	Thr	Tyr	Ala	Leu	Lys	Val	Gly
		35					40					45			
Asp	Ile	Ser	Asp	Ile	Val	Asp	Thr	Asp	Ser	Gly	Val	His	Ile	Ile	Lys
	50					55					60				
Arg	Thr	Glu													
65															

<210> 22  
 <211> 45  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> consensus sequence

His	Thr	Leu	Val	Glu	Lys	Phe	Glu	Leu	Ala	Lys	Ser	Cys	Ser	Ser	Lys
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Gly	Gly	Asp	Leu	Gly	Phe	Arg	Gly	Gln	Met	Phe	Asp	Ala	Ala	Phe	Leu
			20					25					30		
Lys	Gly	Glu	Ser	Pro	Val	Thr	Gly	Tyr	His	Ile	Ile	Lys			
		35					40					45			